

## **ABSTRACT**

A vacuum pickup device for handling semiconductor wafers and interleaf separators comprising a generally flat paddle member having a pickup surface and a planar top surface, a means for drawing air through an orifice in the paddle which creates a first vacuum of a predetermined magnitude on the pickup surface and directing the air over the top surface thereby creating an additional second vacuum at the periphery of the paddle to provide an additional lifting force gently supporting the wafer on the pickup surface whereby a low vacuum is distributed over a wide area to provide a good uniform gentle more even lifting force.